

Remarks

The September 23, 2005 Official Action has been carefully reviewed. In view of the amendments submitted herewith and the following remarks, favorable reconsideration and allowance of this application are respectfully requested.

At the outset it is noted that a shortened statutory response period of three (3) months was set forth in the September 23, 2005 Official Action. Therefore, the initial due date for response was December 23, 2005. A petition for a one (1) month extension of the response period is presented with this response, which is being filed within the one month extension period.

As another preliminary matter, the Examiner has indicated that the method claims of Group IV (i.e., claims 13-23 and 41-43) will not be rejoined with the allowance of a product claim of elected Group I. It is the Examiner's position that the search of Group I will not reveal all art relevant to the invention of Group IV because Group IV "requires the use of products other than the nucleic acid of Group I, and the steps of identifying agents, treating host cells with said agents and assays using said agents are not required in the plant transformation method of Group I." Applicants respectfully disagree. Indeed, claim 27 of elected Group I, which has already been examined on its merits, recites a method of enhancing pathogen resistance in a plant comprising administration of an agent identified by the method of claim 13. Significantly, claim 13 was placed in Group IV by the Examiner and recites a method for contacting host cells comprising SABP2 nucleic acid molecules with at least one agent to determine the agent's ability to modulate SABP2 function. Accordingly, Applicants submit the Examiner has already considered these methods. As such, Applicants submit that rejoinder of Group IV with elected Group I upon the allowance of a product claim is proper and respectfully request the Examiner to reconsider the finality of the

restriction requirement.

At page 3 of the Official Action, the Examiner has objected to claims 3, 7, 8, 26, and 32 on the following four formal grounds. First, the Examiner contends that the phrase "a sequence" recited in claim 3 should be replaced with "the sequence" because the phrase allegedly refers to a specific sequence. Applicants respectfully disagree. Claim 3 refers to a SABP2 nucleic acid molecule which comprises a sequence encoding SEQ ID NO: 2. Inasmuch as many nucleotide sequences encode the amino acid sequence of SEQ ID NO: 2 due to the degeneracy of the genetic code, Applicants submit that the phrase "a sequence" is appropriate and not "the sequence."

Second, Applicants have amended claims 7 and 8 in accordance with the Examiner's helpful suggestions by replacing "An expression vector" with "The vector expression" and "A host cell" with "The host cell," respectively. Accordingly, Applicants submit that the objections to claims 7 and 8 have been rendered moot.

Third, the Examiner has also objected to claim 26, which recites SEQ ID NO: 36, for improperly depending from claim 24. It is the Examiner's position that claim 24, which depends from claim 1, does not recite SEQ ID NO: 36. Applicants respectfully disagree. Claim 1 as originally filed encompasses homologs of SABP2 (SEQ ID NOs: 1 and 2). SEQ ID NO: 36 is a homolog of SABP2 (see, e.g., claim 23, Table IV, and page 7, lines 12-20). Clearly, inasmuch as claim 1 encompassed SEQ ID NO: 36 in item d), the recitation of SEQ ID NO: 36 in claim 26 is proper. Accordingly, Applicants respectfully request that the instant objection be withdrawn.

Lastly, the Examiner has asserted that claim 32 should be amended to recite "further comprises." Applicants respectfully disagree. Claim 32, as originally filed, recited that the transgenic plant of claim 28 comprises the nucleic acid sequence of SEQ ID NO: 36. Claim 28 recites a transgenic plant comprising the nucleic acid molecule of original claim

1, which, in part, recites homologs of SABP2. Inasmuch as SEQ ID NO: 36 is a homolog of SABP2, Applicants submit that the transgenic plants of claim 32 comprise the nucleic acid molecule of SEQ ID NO: 36 as the heterologous nucleic acid. Accordingly, the Examiner's request that the claim be amended to recite "further comprises" is improper.

The Examiner has rejected claims 24-27 under 35 U.S.C. §112, second paragraph for alleged indefiniteness.

Claims 1, 4-9, 24, 26-30, and 32 have also been rejected for allegedly failing to satisfy the enablement and written description requirements of 35 U.S.C. §112, first paragraph.

Lastly, the Examiner has rejected claims 1, 4-9, 24, and 27-30 under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent 5,977,442.

The foregoing objections and rejections constitute all of the grounds set forth in the September 23, 2005 Official Action for refusing the present application.

In accordance with the instant amendment, Applicants have added new claims 44-50. Support for new claims 44 and 45 can be found throughout the specification including, for example, at page 12, line 34 to page 13, line 4; page 36, lines 11-16; and page 41, line 14 to page 42, line 16. Support for new claims 46-49 can be found, for example, in original claims 1, 24, and 28 and in Table IV. Support for claim 50 can be found, for example, at page 13, lines 18-31 and page 15, lines 18-24. Claim 27 has also been amended to incorporate the language of claim 13 inasmuch as claim 13 has been withdrawn.

No new matter has been introduced into this application by reason of any of the amendments presented herewith.

In view of the present amendment and the reasons set forth in this response, Applicants respectfully submit that the objections to claims 3, 7, 8, 26, and 32; the 35 U.S.C.

§112, first paragraph rejections of claims 1, 4-9, 24, 26-30, and 32; the 35 U.S.C. §112, second paragraph rejections of claims 24-27; and the 35 U.S.C. §102(b) of claims 1, 4-9, 24, and 27-30, as set forth in the September 23, 2005 Official Action, cannot be maintained. These grounds of objection and rejection are, therefore, respectfully traversed.

**CLAIMS 24-27, AS AMENDED, MEET THE REQUIREMENTS UNDER 35
U.S.C. §112, SECOND PARAGRAPH**

The Examiner has rejected claims 24-27 under 35 U.S.C. §112, second paragraph for alleged indefiniteness. It is the Examiner's position that claim 24, from which claims 25-27 depend, is indefinite for lacking proper method steps and lacking a correlation between the preamble and the body.

Applicants have amended claim 24 to recite that the overexpression of the SABP2 nucleic acid molecule enhances the resistance of the plant to plant pathogens or other disease causing agents. Accordingly, Applicants respectfully submit that the preamble of the claim correlates with the body of the claim. Additionally, Applicants submit that the claim has a proper method step, namely the overexpression of an SABP2 nucleic acid molecule.

In light of the foregoing, Applicants submit that the rejection of claims 24-27 under 35 U.S.C. §112, second paragraph for alleged indefiniteness is untenable and respectfully request their withdrawal.

**CLAIMS 1, 4-9, 24, 26-30, AND 32, AS AMENDED, SATISFY THE
WRITTEN DESCRIPTION AND ENABLEMENT REQUIREMENTS UNDER 35
U.S.C. §112, FIRST PARAGRAPH**

The Examiner has rejected claims 1, 4-9, 24, 26-30, and 32 for allegedly failing to satisfy the written description and enablement requirements of 35 U.S.C. §112,

first paragraph. It is the Examiner's position that while the specification is enabling for the isolated nucleic acid molecule of SEQ ID NO: 1 and vectors, cells, and plants comprising the same, the specification allegedly fails to enable an isolated nucleic acid molecule comprising a sequence encoding a polypeptide of SEQ ID NO: 2, a complement of SEQ ID NO: 1, and homologs thereof. The Examiner also contends that the specification describes an insufficient number of species to claim the genus of homologs recited in claim 1.

Applicants disagree with the Examiner's position and submit that specification fully enables and provides an adequate written description of the subject matter originally claimed. However, in the sole interest of expediting prosecution of the instant application, Applicants have amended items a), b), and c) of claim 1 to recite that the isolated SABP2 nucleic acid molecule comprises a sequence selected from the group consisting of SEQ ID NO: 1, a sequence encoding **the** polypeptide of SEQ ID NO: 2, and **the** complement of SEQ ID NO: 1, respectively. Inasmuch as SEQ ID NO: 1 and SEQ ID NO: 2 are provided, Applicants submit that the specification is fully enabling and provides an adequate written description for the nucleic acid molecules recited in amended claim 1. Indeed, the MPEP at 2163(II)(A)(3)(a)(ii) states that upon the disclosure of an amino acid sequence, "it would be unnecessary to provide an explicit disclosure of nucleic acid sequences that encoded the amino acid sequence" because the skilled artisan is well-apprised of the genetic code.

With regard to homologs of the SABP2 nucleic acid molecules, Applicants submit that the specification fully enables and provides an adequate written description of homologs of SEQ ID NO: 1, a sequence encoding the polypeptide of SEQ ID NO: 2, and the complement of SEQ ID NO: 1. Indeed, the specification defines SABP2 homologs as nucleic acid molecules comprising similar structural properties such as

sequence identity and SABP2 orthologs, as recited in claim 50, as nucleic acid molecules which have a similar structural property and a similar functional property, such as the expression, enzymatic activity, and binding properties of the encoded for protein (page 15, lines 18-24). Furthermore, Example IV at pages 75-79 provides an exemplary method for obtaining and identifying homologs and orthologs of SABP2. Indeed, 18 sequences of SABP2 homologs are provided. In view of the instruction provided, the recitation of structural and functional limitations, and the identification of a substantial number of species within the claimed genus, Applicants respectfully submit that the specification is fully enabling and provides an adequate written description for the instantly claimed nucleic acid molecules.

In view of the foregoing, Applicants submit that the Examiner's rejections of claims 1, 4-9, 24, 26-30, and 32 for allegedly failing to satisfy the written description and enablement requirements of 35 U.S.C. §112, first paragraph are untenable and respectfully request their withdrawal.

**CLAIMS 1, 4-9, 24, AND 27-30, AS AMENDED, ARE NOT ANTICIPATED
BY U.S. PATENT 5,977,442**

The Examiner has rejected claims 1, 4-9, 24, and 27-30 under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent 5,977,442. The Examiner alleges that the '442 patent discloses the SIP encoding nucleic acid molecule from tobacco which has a role in signal transduction for the activation of plant defenses against pathogens and is salicylic acid inducible. Because of the breadth the Examiner has afforded claim 1 as previously presented, it is the Examiner's position that claim 1 encompasses the SIP nucleic acid molecule of the '442 patent.

In order to constitute evidence of lack of novelty under 35 U.S.C. §102(b), a prior art reference must identically disclose each and every element of the rejected

claim. In re Bond, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

For the reasons stated hereinabove, Applicants have amended claim 1, from which claims 4-9, 24, and 27-30 depend, to recite that the SABP2 nucleic acid molecule comprises a sequence selected from the group consisting of SEQ ID NO: 1, a sequence encoding the polypeptide of SEQ ID NO: 2, the complement of SEQ ID NO: 1, and homologs thereof. Applicants respectfully submit that the '442 patent fails to teach SEQ ID NO: 1, the complement thereof, a sequence which encodes the polypeptide of SEQ ID NO: 2, or homologs thereof. Indeed, the protein disclosed in the '442 patent is a MAP kinase which does not bind salicylic acid, whereas the instantly claimed SABP2 binds salicylic acid and has esterase/lipase activity.

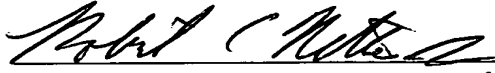
Inasmuch as the '442 patent fails to teach each and every element of claim 1 and dependent claims 4-9, 24, and 27-30, Applicants submit that the instant rejection under 35 U.S.C. §102(b) is untenable and respectfully request its withdrawal.

CONCLUSION

In view of the amendments presented herewith and the foregoing remarks, it is respectfully urged that the objections and rejections set forth in the September 23, 2005 Official Action be withdrawn and that this application be passed to issue.

In the event the Examiner is not persuaded as to the allowability of any claim, and it appears that any outstanding issues may be resolved through a telephone interview, the Examiner is requested to telephone the undersigned agent at the phone number give below.

Respectfully submitted,
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